

IN THE SPECIFICATION:

Please replace the paragraph beginning on page 1, line 3, with the following amended paragraph:

This application is a continuation-in-part of application US Serial No. ~~10/395,941~~ 10/359,941, filed February 6, 2003.

Please replace the paragraph beginning on page 3, line 23, with the following amended paragraph:

In accordance with the present invention, there is provided an additive/process aid for polymeric materials such as rubber elastomers or plastic materials which overcomes the limitations of earlier additives/process aids.

Please replace the paragraph beginning on page 6, line 20, with the following amended paragraph:

Suitable epoxy compounds comprise molecules having at least one or more epoxide group per molecule and include epoxidized alkanes, alkenes, cycloalkanes, alkenes and other epoxidized polymers and chemicals. For example, epoxy/ether, epoxy/hydroxyl, epoxy/ester, epoxy/amine, ether/amine, and cycloaliphatic ether/hydroxyl group. These compounds contain aliphatic and/or cycloaliphatic groups. Examples include Octyl Epoxy Tallate (Argus Chemical and Union Carbide), Epoxyprene 25 and 50 (Epoxidized Natural

Rubber from Guthrie Latex), Epon (Epoxidized Bisphenol A from Shell Oil Co.), Styrene Oxide (S500-6 Aldrich Chemical Co.) and 1,2-Epoxy-3-phenoxypropane (24,848-7 Aldrich Chemical Co.). Epoxidized plant(or vegetable) oils, such as epoxidized soybean oil @ C P Hall PARAPLEX G62, Argus Chemical, Union Carbide and Harwick Standard) and epoxidized linseed oil (Argus Chemical), are most preferred.

Please replace the paragraph beginning on page 10, line 19, with the following amended paragraph:

The additive/process aid of the present invention is prepared as a slow speed, mixer blend. The components of the additive/process aid are added together and mixed, and reacted under suitable time and temperature conditions. ~~Preferably, these components are cured for 12 minutes at 307°F.~~

Please replace the paragraph beginning on page 17, line 3, with the following amended paragraph:

ADDITIVE/PROCESS AID COMPOSITION

Ingredient	DB6	
	(Wet. %)	<u>(Wt. %)</u>
gray slate flour	25	
corn starch	25	
epoxidized soybean oil	5	
calcium carbonate	35	
stearic acid	10	

Please replace the paragraph beginning on page 17, line 16, with the following amended paragraph:

TABLE IX

	EXAMPLE B	CONTROL 3
<u>MATERIAL</u>	<u>PER PHR</u>	<u>PER PHR</u>
Natural Rubber (SMR20)	30.0	30.0
SBR 1520 <u>1502</u>	70.0	70.0
Carbon Black (N339)	50.0	50.0
DB6	2.0	0.0
Sunder <u>Sundex</u> 750 T	10.0	10.0
Antioxidant (Santoflex 134)	2.0	2.0
Stearic Acid	2.0	2.0
Zinc Oxide	2.5	2.5
Akrowax 5030	2.0	2.0
Sulfur	2.0	2.0
Accelerator CBS ¹	1.7	1.7
Co-accelerator DPG ²	0.2	0.2
Final Total	174.4	172.4

¹N-Cyclohexyl-benzothiazolesulfenamide

²~~Diphenylguanidine~~ Diphenylguanidine

Mix Cycle: Example B and the Control were mixed in the same manner except for the inclusion of DB6 in Example B.

Accordingly, the rubber and carbon black together with DB6 in the case of Example B were mixed for 1.5 minutes at 60 RPM in a mixer preheated to 250°F. Oil followed by Santoflex 134, stearic acid, zinc oxide and Akrowax 5030 were added, and mixing continued to a total mix time of 5.5 minutes. Then, the batches were dumped, formed into sheets on a two roll mill and allowed to cool.

Finish Cycle: The masterbatch followed by CBS, DPG and sulfur are combined in a mixer preheated to 175°F and mixed

at 50 RPM for one minute or temperature increase to 200°F, whichever came first. Each of the rubber elastomers was then provided with 10 roll passes on a 2 roll mill followed by ~~one~~ ten cut ~~pass~~ passes.

Please replace the paragraph beginning on page 20, line 22, with the following amended paragraph:

ADDITIVE/PROCESS AID COMPOSITIONS

Ingredient	DB6H	DB6L
	(Wet. %) (Wt. %)	(Wet. %) (Wt. %)
gray slate flour	30	10
corn starch	35	10
epoxidized soybean oil	15	5
calcium carbonate	5	70
stearic acid	15	5

Please replace the paragraph beginning on page 21, line 3, with the following amended paragraph:

TABLE XI

	EXAMPLE C	EXAMPLE D	CONTROL 4
	PER <u>PHR</u>	PER <u>PHR</u>	PER <u>PHR</u>
<u>MATERIAL</u>			
Natural Rubber			
(SMR20)	30.0	30.0	30.0
SBR 1520	70.0	70.0	70.0
Carbon Black(N343)	41.0	41.0	41.0
DB6H	2.0	0.0	0.0
DB6L	0.0	6.0	0.0
Aromatic Oil(Shell 750)	10.0	10.0	10.0
Antioxidant			
(Santoflex 13)	1.0	1.0	1.0
Stearic Acid	2.0	2.0	2.0
Zinc Oxide	2.5	2.5	2.5
Akrowax 5030	1.0	1.0	1.0
Masterbatch Total	157.5	159.5	163.5

Masterbatch	157.5	159.5	163.5
Sulfur	1.3	1.3	1.3
Accelerator CBS ¹	1.7	1.7	1.7
Co-accelerator DPG ²	0.2	0.2	0.2
Final Total	160.7	162.7	166.7

¹N-Cyclohexyl-benzothiazolesulfenamide

²~~Diphenylguaidine~~ Diphenylguanidine